

Claims:

1. An aluminum alloy for heat exchanger tubing comprising 0.4 to 1.1% by weight manganese, up to 0.01%
5 by weight copper, up to 0.05% by weight zinc, up to 0.2% by weight iron, up to 0.2% by weight silicon, up to 0.01% by weight nickel, up to 0.05% by weight titanium and the balance aluminum and incidental impurities.
- 10 2. An aluminum alloy according to claim 1 which has been homogenized at a temperature of between 580 and 620°C.
- 15 3. An aluminum alloy according to claim 1 or 2 which has been extruded into tubing and brazed.
- 20 4. Brazed extruded heat exchanger tubing formed from an aluminum alloy comprising 0.4 to 1.1% by weight manganese, up to 0.01% by weight copper, up to 0.05% by weight zinc, up to 0.2% by weight iron, up to 0.2% by weight silicon, up to 0.01% by weight nickel, up to 0.05% by weight titanium and the balance aluminum and incidental impurities.
- 25 5. A brazed heat exchanger assembly comprising joined heat exchanger tubes and heat exchange fins wherein the tubes are extruded tubes formed of a first aluminum alloy comprising 0.4 to 1.1% percent by weight manganese, up to 0.01% by weight copper, up to 0.05% by weight zinc, up to 0.2% by weight iron, up to 0.2% by

- weight silicon, up to 0.01% by weight nickel and the balance aluminum and incidental impurities and the fins are formed of a second aluminum alloy selected from the group consisting of an alloy comprising 0.9 to 1.5% by weight manganese and an alloy of the AA3003 type, said second aluminum alloy further containing at least 0.5% by weight zinc, whereby the brazed tubes exhibit good self corrosion protection and the fins are galvanically sacrificial relative to the tubes.
- 5 10 6. A brazed heat exchanger assembly according to claim 5 wherein the difference between the manganese content of the first aluminum alloy is related to the manganese content of the second aluminum alloy by the formula
- 15 $Mn_{tube} \text{ (wt\%)} > Mn_{fin} \text{ (wt\%)} - 0.8 \text{ wt\%}$
- where Mn_{tube} is the manganese content of the first aluminum alloy and Mn_{fin} is the manganese content of the second aluminum alloy.
7. A brazed heat exchanger assembly according to
20 claim 5 or 6 wherein the second aluminum alloy contains less than 0.05% by weight copper.
8. A brazed heat exchanger assembly according to
claim 5, 6 or 7 where the galvanic current from fin to tube is greater than +0.05 microamps per square
25 centimeter.
9. A brazed heat exchanger assembly according to any one of claims 5 to 8 where the first aluminum alloy contains between 0.6 and 1.1% by weight manganese.

10. A brazed heat exchanger assembly according to claim 9 where the first aluminum alloy contains between 0.9 and 1.1% by weight manganese.